



GreenTools; Regional Code Collaboration



King County

Department of
Natural Resources and Parks
Solid Waste Division

Waste
Prevention

Resource
Recovery

Waste
Disposal

**“The whole is greater than the sum of its parts.”
- Aristotle**

Regional Code Collaboration (RCC)

- Builds Capacity
- Pro-active & Collaborative!
- Resource Sharing
- Regional Approach to Sustainable Code Development
- Extends the life of Cedar Hills by managing C&D outside of our system
- Creates Transparency
- Extends beyond the borders of King County
- Encouraging sustainable development supports our mission to keep waste from being generated (and thus out of the landfill)



Initial Process for Stakeholders (Sponsored by City of Seattle)

- Distribution of an informative mailing to associations and industry groups
- Presented draft code proposals to interested groups
- Hosted 2 open houses
(included King County, Kirkland, Issaquah and Shoreline)
- Provided 3 on-line comment periods

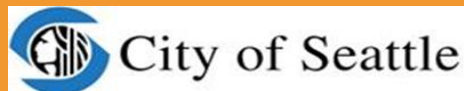
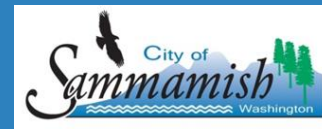


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Relationships

- Countywide Green Building Task Force
(provides green building education countywide for residential and commercial construction)
- Aligns code priorities in support of K4C work program
- King County SCAP
(an integral part of implementing climate action priorities)
- RCC supports the KC SWD Vision to achieve zero waste of resources and enhance the environment through collaboration and innovation.



King County-Cities Climate Collaboration

Joint Commitments

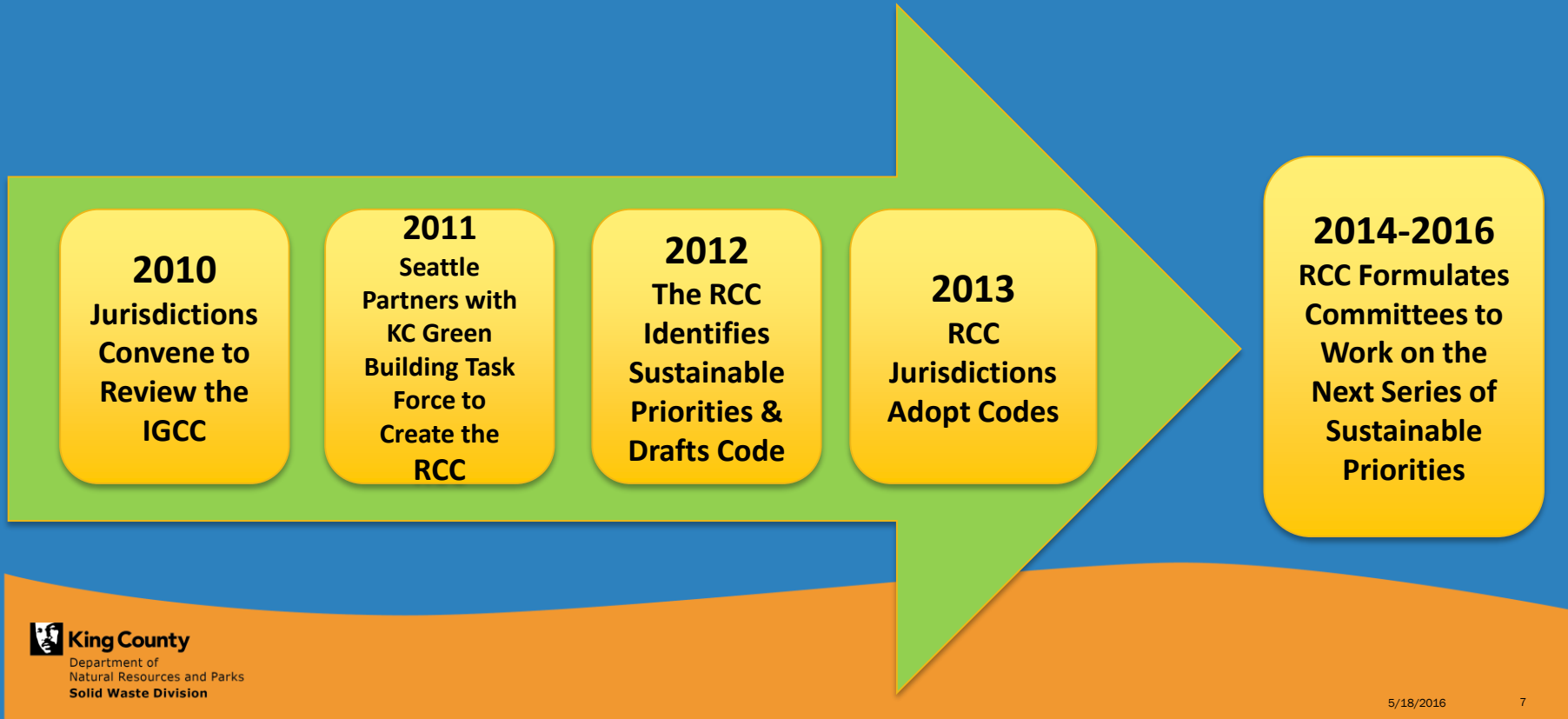
Category	K4C Pathways
Transportation	<ul style="list-style-type: none">▪ 15% reduction in vehicle carbon fuel intensity due to proposed 10% statewide clean fuels standard (CFS) and 5% additional reduction▪ 20% reduction in vehicle miles traveled
Buildings	<ul style="list-style-type: none">▪ No net carbon emissions from new buildings; new buildings in 2031 will be 70% more energy efficient than new buildings in 2006 (state code)▪ 25% reduction in existing building electricity use▪ 25% reduction in direct natural gas use for heating in existing buildings
Energy supply	<ul style="list-style-type: none">▪ 90% renewable electricity use (20% more than current), phase out coal by 2025, and limit natural gas-based electricity generation to current level

What Will It Take to Meet Reduction Targets?

Carbon Wedge Analysis estimated the GHG emission reduction associated with strategies in two areas, consistent with national best practices and existing City priorities.

Category	Proposed Sector Targets for Shoreline to Achieve 50x30
Transportation	<ul style="list-style-type: none">▪ 35% community-wide vehicle miles traveled (VMT) reduction by 2030, relative to 2012▪ 25% reduction in vehicle carbon fuel intensity by 2030 (due to proposed 10% statewide clean fuel standard and 15% additional local reduction)
Building energy efficiency	<ul style="list-style-type: none">▪ Net zero greenhouse gas emissions in 100% of new buildings community-wide by 2030 (due to new buildings in 2030 being 70% more efficient than new buildings in 2006, per state law)▪ 40% reduction in natural gas consumption for heating in existing buildings community-wide by 2030, relative to 2012

The RCC Path



2013 RCC Code Development

Water Conservation

- Efficient Irrigation Design
- Automatic shut-off for sinks
- Reduced flow Plumbing Fixtures
- Zoning for Rain Catchment Systems

Energy Measures

- Zoning Allowance for Exterior Insulation
- Heat Island Mitigation
- Light Trespass reduction



2013 RCC Code Development

Sustainable Transportation

- Electric Vehicle Charging Stations
- Short and Long-term Bicycle Parking
- Showers and Changing Facilities



Material Conservation

- Construction & Demolition Waste Diversion
- Protection of materials from moisture

2015-2016 Work Program

- Recruit more cities and counties
- Work with subcommittees on new and existing initiatives:
 1. Living Building Challenge Demonstration Ordinance
 2. Construction & Demolition Jobsite Permitting Ordinance
 3. “Reach” Energy Code
 4. Update Recycling Code (SWD Initiative)



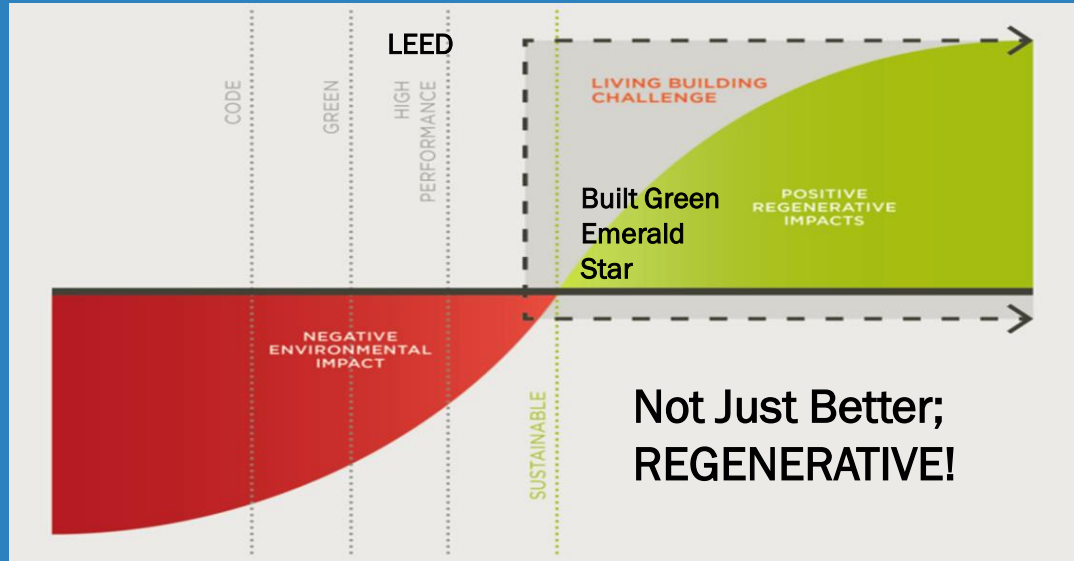
K4C Mayor's Summit June 2014



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Living Building Challenge Demonstration Ordinance



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Code Process

National Code Development

National codes are
Updated Every 3 Years

Washington State

Local Jurisdiction

Jurisdictions
Cannot Amend:

- Residential Code
- Energy Code (Residential)

Jurisdictions
May Further
Amend:

- Building
- Plumbing
- Mechanical
- Fire
- Energy (Commercial)

Amends and Adopts
6 National Codes
That Local Jurisdictions
Must Enforce:

- Building
- Residential
- Energy
- Plumbing
- Mechanical
- Fire

Local Codes
Adopted

National Recognition



2011 ICC Committee Recognition for the collective work completed by the RCC

Harvard Kennedy School of Government
Bright Idea Award 2012



Regional Code Collaboration for
Living Buildings and “Geeky Issues”

Washington State Energy Code Wins 2015 State Energy Code Progress

- Residential
 - Ductless mini-split heat pumps
 - More “Additional Efficiency” credits
 - (we can update commercial not residential)
- Commercial
 - Solar ready roof
 - Reduced lighting power
 - Efficient HVAC controls
 - Two “Additional Efficiency” credits



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Education: Green Inspector Training

October 26th 2016 – Smart Building Center

- Provides an overview of technologies in green building
- Trends for Built Green Emerald Star and LBC projects
- Green Remodeling
- Water reuse and water conservation, rainwater harvesting, black water recycling
- Toxic materials
- Featured Instructors:
Martha Rose and David Johnston



Construction and Demolition Waste

- Countywide C&D Ordinance – became effective 2016
 - Bans disposal of readily recyclable materials
 - Establishes system for designating qualified facilities
 - Authorizes enforcement of regulations by a KC Sheriff
- Supports recycling and greenhouse gas reduction goal
- RCC is developing code language for jobsite permitting agencies to compliment the countywide ordinance in their jurisdiction
- Jobsite requirements for proper handling of C&D will reduce the amount of C&D being taken in small loads to our transfer stations, thereby extending the life of our landfill



Construction and Demolition Jobsite Permitting Code (draft)

All permitted projects must:

- Use designated facilities
- Use two containers (1 for recycling and 1 for waste)
- Submit an asbestos compliance declaration

Projects greater than 1,000 sf must:

- Submit a waste diversion statement of intent
- Submit a waste diversion report
- Complete a deconstruction and salvage assessment (for alterations or whole building removal)



Questions?

Thank You!



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